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COMBINED DECLARATION AND FOWER OF ATTORNEY

| As a below named inventor, I hereby declare that: My residence, post office address and citizenship are as stated below next to my name, I believe I am the original, first and sole inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled COLOR INTERPOLATION, the specification of which is attached hereto. was filed on February 23, 1998 as Application Serial No. 09/028,961. was described and claimed in PCT International Application No. filed on and as amended under PCT Article 19 on |
|---|
| I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above. |
| I acknowledge the duty to disclose all information I know to be material to patentability in accordance with Title 37, Code of Federal Regulations, §1.56(a). |
| I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose all information I know to be material to patentability as defined in Title 37, Code of Federal Regulations, §1.56(a) which became available between the filing date of the prior application and the national or PCT international filing date of this application: |
| U.S. SERIAL NO. FILING DATE STATUS Pending Issued Abandoned |
| I hereby appoint the following anomeys and/or agents to prosecure this application and to transact all business in the Parent and Trademark Office connected therewith: Scott C. Harris, Reg. No. 32.030; William J. Egan, III, Reg. No. 28,411; David L. Feigenbaum, Reg. No. 30,378; John F. Land, Reg. No. 29,554; Ralph A. Mittelberger, Reg. No. 33,195; Hans R. Troesch, Reg. No. 36,950 and John R. Wetherell, Jr., Reg. No. 31,678 of Fish & Richardson P.C. |
| Address all telephone calls to <u>SCOTT C. HARRIS</u> at telephone number 619/678-5070. Address all correspondence to <u>SCOTT C. HARRIS</u> , Fish & Richardson P.C., 4225 Executive Square, Suite 1400, La Jolla, CA 92037. |
| I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patents issued thereon. |
| Full Name of Inventor: Eric R. Fossum |
| Inventor's Signature: |
| Residence Address: <u>La Crescenta, California</u> |
| Chited on |
| Post Office Address: 5556 Pinecone Road. La Crescenta, CA 91214 |
| 69.57.LT |

Docket No.: M4065.0774/P774

(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Eric R. Fossum

Application No.: 09/028,961

Group Art Unit: 2612

Filed: February 23, 1998

Examiner: A. Harrington

For: INTERPOLATOR FOR A CMOS IMAGE

SENSOR USING A DIGITAL REGISTER

(AS AMENDED)

SUBMISSION OF POWER OF ATTORNEY BY ASSIGNEE AND CERTIFICATE BY ASSIGNEE UNDER 37 C.F.R. 3.73(B)

Commissioner for Patents Washington, DC 20231

Dear Sir:

Submitted herewith is an executed Power of Attorney by Assignee and Certificate by Assignee under 37 C.F.R. § 3.73(b) in relation to the above-captioned matter. Also attached is a copy of the related Assignment.

Dated: January 21, 2003

Respectfully submitted,

Thomas J. D'Amico

Registration No.: 28,371

DICKSTEIN SHAPIRO MORIN &

OSHINSKY LLP 2101 L Street NW

Washington, DC 20037-1526

(202) 785-9700

Attorneys for Applicant

Docket No.: M4065.0774/P774 (PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Eric R. Fossum

Application No.: 09/028,961

Group Art Unit: 2612

Filed: February 23, 1998

Examiner: A. Harrington

For: INTERPOLATOR FOR A CMOS IMAGE

SENSOR USING A DIGITAL REGISTER

(AS AMENDED)

REVOCATION OF POWER OF ATTORNEY AND NEW POWER OF ATTORNEY

Commissioner for Patents Washington, DC 20231

Dear Sir:

The undersigned, a duly authorized representative of Micron Technology, Inc. and current assignee of this application as demonstrated by the attached copy of the assignment, hereby revokes all Powers of Attorney previously given, and hereby appoints the following attorneys and/or agents to prosecute this application and transact all business in the U.S. Patent and Trademark Office connected herewith:

| Gary M. Hoffman | 26,411 | Ryan H. Flax | 48,141 | Ellen S. Tao | 43,383 |
|---------------------|--------|------------------------|--------|----------------------|--------|
| • | 28,371 | Richard LaCava | 41,135 | Gary L. Veron | 39,057 |
| Thomas J. D'Amico | 28,954 | John C. Luce | 34,378 | Steven I. Weisburd | 27,409 |
| Donald A. Gregory | • | Peter McGee | 35,947 | Peter Zura | 48,196 |
| James W. Brady, Jr. | 32,115 | | 24.735 | Jeremy A. Cubert | 40,399 |
| Jon D. Grossman | 32,699 | Edward A. Meilman | 24,733 | Gianni Minutoli | 41,198 |
| Mark J. Thronson | 33,082 | | | | 42,318 |
| Eric Oliver | 35,307 | William E. Powell, III | 39,803 | Michael Bergman | , |
| Laurence E. Fisher | 37,131 | Steven S. Rubin | 43,063 | Salvatore P. Tamburo | 45,153 |
| Ian R. Blum | 42,336 | Michael J. Scheer | 34,425 | Peter A. Veytsman | 45,920 |

Docket No.: M4065.0774/P774 Application No.: 09/028,961

Gabriela I. Coman

50,515

Stephen A. Soffen

31,063

Christopher S. Chow

46,493

Catherine A. Ferguson

40,877

Christopher M. Tanner

41,518

All attorneys of the law firm Dickstein Shapiro Morin & Oshinsky LLP and also, listed as follows:

Charles B. Brantley, III

38,086

Kevin D. Martin

37,882

Russell Slifer

39,838

Michael L. Lynch

30,871

David J. Paul

34,692

attorneys/agents of Micron Technology, Inc. as its attorneys with full power of substitution to prosecute this application and to transact all business in the Patent and Trademark Office in connection therewith.

Address all communications to:

Thomas J. D'Amico DICKSTEIN SHAPIRO MORIN & OSHINSKY LLP 2101 L Street NW Washington, DC 20037-1526 (202) 785-9700

For: Micron Technology, Inc.

Michael L. Lynch

Dated:

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RECORDATION DATE: 03/29/2002

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BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

PHOTOBIT CORPORATION

DOC DATE: 11/21/2001

ASSIGNEE:

MICRON TECHNOLOGY, INC. 8000 S. FEDERAL WAY BOISE, IDAHO 83706-9632

SERIAL NUMBER: 09025079

025079 FILING DATE: 02/17/1998

PATENT NUMBER: ISSUE DATE:

SERIAL NUMBER: 09031145 FILING DATE: 02/26/1998

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PATENT NUMBER: ISSUE DATE:

SERIAL NUMBER: 09038888 FILING DATE: 03/11/1998

PATENT NUMBER: ISSUE DATE:

SERIAL NUMBER: 09066506 FILING DATE: 04/23/1998

PATENT NUMBER: ISSUE DATE:

SERIAL NUMBER: 09183389 FILING DATE: 10/29/1998 PATENT NUMBER: ISSUE DATE: SERIAL NUMBER: 09209982 FILING DATE: 12/09/1998 PATENT NUMBER: ISSUE DATE: SERIAL NUMBER: 09211718 FILING DATE: 12/14/1998 PATENT NUMBER: ISSUE DATE: SERIAL NUMBER: 09250623 FILING DATE: 02/16/1999 PATENT NUMBER: ISSUE DATE: SERIAL NUMBER: 09251758 FILING DATE: 02/18/1999 PATENT NUMBER: 6365886 ISSUE DATE: 04/02/2002 SERIAL NUMBER: 09252428 FILING DATE: 02/18/1999 PATENT NUMBER: 6388241 ISSUE DATE: 05/14/2002 SERIAL NUMBER: 09264501 FILING DATE: 03/08/1999 PATENT NUMBER: ISSUE DATE: SERIAL NUMBER: 09267503 FILING DATE: 03/12/1999 PATENT NUMBER: ISSUE DATE: SERIAL NUMBER: 09274739 FILING DATE: 03/23/1999 PATENT NUMBER: ISSUE DATE: SERIAL NUMBER: 09281358 FILING DATE: 03/30/1999 PATENT NUMBER: ISSUE DATE: SERIAL NUMBER: 09281361 FILING DATE: 03/30/1999 PATENT NUMBER: ISSUE DATE: SERIAL NUMBER: 09284765 FILING DATE: 06/17/1999

PATENT NUMBER: 6247873 ISSUE DATE: 06/19/2001

SERIAL NUMBER: 09298306 FILING DATE: 04/23/1999 PATENT NUMBER: ISSUE DATE:

SERIAL NUMBER: 09299066 FILING DATE: 04/23/1999 PATENT NUMBER: ISSUE DATE:

SERIAL NUMBER: 09354930 FILING DATE: 07/15/1999 PATENT NUMBER: ISSUE DATE:

SERIAL NUMBER: 09359056 FILING DATE: 07/21/1999 PATENT NUMBER: ISSUE DATE:

SERIAL NUMBER: 09359065 FILING DATE: 07/21/1999 PATENT NUMBER: ISSUE DATE:

SERIAL NUMBER: 09359068 FILING DATE: 07/21/1999

PATENT NUMBER: ISSUE DATE:

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SERIAL NUMBER: 09527422 FILING DATE: 03/17/2000 PATENT NUMBER: ISSUE DATE: SERIAL NUMBER: 09538043 FILING DATE: 03/29/2000 PATENT NUMBER: ISSUE DATE: SERIAL NUMBER: 09550816 FILING DATE: 04/18/2000 PATENT NUMBER: ISSUE DATE: SERIAL NUMBER: 09553980 FILING DATE: 04/20/2000 PATENT NUMBER: ISSUE DATE: SERIAL NUMBER: 09590785 FILING DATE: 06/08/2000 PATENT NUMBER: ISSUE DATE: SERIAL NUMBER: 09595592 FILING DATE: 06/15/2000 PATENT NUMBER: ISSUE DATE: SERIAL NUMBER: 09596757 FILING DATE: 06/15/2000 PATENT NUMBER: ISSUE DATE: SERIAL NUMBER: 09648403 FILING DATE: 08/24/2000 PATENT NUMBER: ISSUE DATE: SERIAL NUMBER: 09653527 FILING DATE: 08/31/2000 PATENT NUMBER: ISSUE DATE: SERIAL NUMBER: 09681639 FILING DATE: 05/15/2001 PATENT NUMBER: ISSUE DATE: SERIAL NUMBER: 09683156 FILING DATE: 11/27/2001 PATENT NUMBER: ISSUE DATE: SERIAL NUMBER: 09687266 FILING DATE: 10/12/2000 PATENT NUMBER: ISSUE DATE: SERIAL NUMBER: 09692742 FILING DATE: 10/18/2000 PATENT NUMBER: ISSUE DATE: SERIAL NUMBER: 09711379 FILING DATE: 11/09/2000 PATENT NUMBER: ISSUE DATE: SERIAL NUMBER: 09739932 FILING DATE: 12/18/2000 PATENT NUMBER: 6388593 ISSUE DATE: 05/14/2002 SERIAL NUMBER: 09745854 FILING DATE: 12/22/2000 PATENT NUMBER: ISSUE DATE: SERIAL NUMBER: 09746565 FILING DATE: 12/21/2000

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| SERIAL NUMBER: PATENT NUMBER: | 09761868 | FILING DATE: ISSUE DATE: | 01/16/2001 |
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| SERIAL NUMBER: PATENT NUMBER: | | | |
| SERIAL NUMBER: PATENT NUMBER: | 09847894 | FILING DATE: ISSUE DATE: | 05/02/2001 |
| SERIAL NUMBER: PATENT NUMBER: | | FILING DATE: ISSUE DATE: | 05/16/2001 |
| SERIAL NUMBER: PATENT NUMBER: | 09859224 | FILING DATE: ISSUE DATE: | 05/15/2001 |
| SERIAL NUMBER: PATENT NUMBER: | 09860031 | FILING DATE: ISSUE DATE: | 05/16/2001 |
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| SERIAL NUMBER: PATENT NUMBER: | | | |
| SERIAL NUMBER: PATENT NUMBER: | 09901280 | FILING DATE: ISSUE DATE: | 07/09/2001 |
| SERIAL NUMBER: PATENT NUMBER: | 09917195 | FILING DATE: ISSUE DATE: | 07/26/2001 |
| SERIAL NUMBER: PATENT NUMBER: | | FILING DATE: ISSUE DATE: | 08/03/2001 |
| SERIAL NUMBER: PATENT NUMBER: | | FILING DATE: ISSUE DATE: | 10/10/2001 |
| SERIAL NUMBER: PATENT NUMBER: | , | FILING DATE: ISSUE DATE: | 10/12/2001 |
| SERIAL NUMBER: PATENT NUMBER: | | FILING DATE: ISSUE DATE: | 11/21/2001 |

SERIAL NUMBER: 10000660 FILING DATE: 10/30/2001 PATENT NUMBER: ISSUE DATE: SERIAL NUMBER: 10003662 FILING DATE: 10/18/2001 PATENT NUMBER: ISSUE DATE: SERIAL NUMBER: 10003821 FILING DATE: 10/31/2001 PATENT NUMBER: ISSUE DATE: SERIAL NUMBER: 10010685 FILING DATE: 11/08/2001 PATENT NUMBER: ISSUE DATE: SERIAL NUMBER: 10034091 FILING DATE: 12/27/2001 PATENT NUMBER: ISSUE DATE: SERIAL NUMBER: 10038546 FILING DATE: 10/24/2001 PATENT NUMBER: ISSUE DATE: SERIAL NUMBER: 10040058 FILING DATE: 10/26/2001 PATENT NUMBER: ISSUE DATE: SERIAL NUMBER: 10041781 FILING DATE: 10/18/2001 PATENT NUMBER: ISSUE DATE: SERIAL NUMBER: 10053110 FILING DATE: 10/26/2001 PATENT NUMBER: ISSUE DATE: SERIAL NUMBER: 10061938 FILING DATE: 10/25/2001 PATENT NUMBER: ISSUE DATE: SERIAL NUMBER: 08723897 FILING DATE: 09/30/1996 PATENT NUMBER: 5995163 ISSUE DATE: 11/30/1999 SERIAL NUMBER: 08944794 FILING DATE: 10/06/1997 PATENT NUMBER: 6005619 ISSUE DATE: 12/21/1999 SERIAL NUMBER: 09038635 FILING DATE: 03/10/1998 PATENT NUMBER: 6043690 ISSUE DATE: 03/28/2000 SERIAL NUMBER: 09038887 FILING DATE: 03/11/1998 PATENT NUMBER: 6087970 ISSUE DATE: 07/11/2000 SERIAL NUMBER: 09093968 FILING DATE: 06/08/1998 PATENT NUMBER: 6137100 ISSUE DATE: 10/24/2000 SERIAL NUMBER: 09161355 FILING DATE: 09/25/1998 PATENT NUMBER: 6295013 ISSUE DATE: 09/25/2001 SERIAL NUMBER: 09169020 FILING DATE: 10/08/1998 PATENT NUMBER: 6255970 ISSUE DATE: 07/03/2001 SERIAL NUMBER: 09170944 FILING DATE: 10/13/1998 PATENT NUMBER: 6215428 ISSUE DATE: 04/10/2001

SERIAL NUMBER: 09173982 FILING DATE: 10/16/1998 ISSUE DATE: 11/14/2000 PATENT NUMBER: 6147519 FILING DATE: 11/12/1998 SERIAL NUMBER: 09191201 ISSUE DATE: 02/20/2001 PATENT NUMBER: 6191714 FILING DATE: 12/16/1998 SERIAL NUMBER: 09215571 ISSUE DATE: 04/11/2000 PATENT NUMBER: 6049247 FILING DATE: 02/04/1999 SERIAL NUMBER: 09246013 ISSUE DATE: 04/24/2001 PATENT NUMBER: 6222172 FILING DATE: 03/08/1999 SERIAL NUMBER: 09265133 ISSUE DATE: 04/24/2001 PATENT NUMBER: 6222175 SERIAL NUMBER: 09265936 FILING DATE: 03/10/1999 ISSUE DATE: 02/27/2001 PATENT NUMBER: 6194696 FILING DATE: 03/15/1999 SERIAL NUMBER: 09270298 ISSUE DATE: 03/20/2001 PATENT NUMBER: 6204792 FILING DATE: 03/26/1999 SERIAL NUMBER: 09277617 ISSUE DATE: 12/26/2000 PATENT NUMBER: 6166367 FILING DATE: 04/01/1999 SERIAL NUMBER: 09283659 ISSUE DATE: 02/06/2001 PATENT NUMBER: 6184721 SERIAL NUMBER: 09304526 FILING DATE: 05/04/1999 ISSUE DATE: 04/03/2001 PATENT NUMBER: 6211804 FILING DATE: 05/21/1999 SERIAL NUMBER: 09316701 ISSUE DATE: 08/01/2000 PATENT NUMBER: 6097545 FILING DATE: 07/20/1999 SERIAL NUMBER: 09357605 ISSUE DATE: 05/08/2001 PATENT NUMBER: 6229134 FILING DATE: 08/19/1999 SERIAL NUMBER: 09378565

ISSUE DATE: 05/29/2001

JEFFREY OLSEN, EXAMINER ASSIGNMENT DIVISION OFFICE OF PUBLIC RECORDS

PATENT NUMBER: 6239456

04-11-2002

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|---|--|
| 1. Nam of conveying party(ies): | 2. Name and address f receiving party(ies): |
| 1. Nam of conveying party(les): Photobit Corporation 3-29-57 | 2. Name and address f receiving party(ies): Micron Technology, Inc. 8000 S. Federal Way Boise ID 83706-9632 |
| 135 North Los Robles Avenue, 7th Floor | 8000 S. Federal Way |
| Pasadena, California 91101 | 8000 S. Federal Way Boise ID 83706-9632 |
| Additional name(s) attached? ☐ Yes 图 No | |
| 3. Nature of conveyance: | LIS RECORD MY 9: 58 SECTION |
| 回 Assignment | FEC 7 |
| ☐ Merger ☐ Security Agreement | |
| ☐ Change of Name | _ & & & & |
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| 4. Application number(s) or patent number(s): | |
| If this document is being filed with a new application, the execution | date of the application is: |
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| document should be mailed: | 6. Total number of applications/patents involved: 107 |
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Tere Halligan
Typed Name of Person Signing Certificate

SCHEDULE A

| | •• | |
|--------------|----------------|------------|
| Docket No. | Filing Date | Serial No. |
| 08305/017001 | 2/17/1998 | 09/025,079 |
| 08305/004001 | 2/26/1998 | 09/031,145 |
| 08305/023001 | 3/11/1998 | 09/038,888 |
| 08305/036001 | 4/23/1998 | 09/066,506 |
| 08305/048001 | 10/29/1998 | 09/183,389 |
| 08305/050001 | 12/9/1998 | 09/209,982 |
| 08305/015001 | 12/14/1998 | 09/211,718 |
| 08305/022001 | 2/16/1999 | 09/250,623 |
| 08305/019001 | 2/18/1999 | 09/251,758 |
| 08305/020001 | 2/18/1999 | 09/252,428 |
| 08305/026001 | 3/8/1999 | 09/264,501 |
| 08305/055001 | 3/12/1999 | 09/267,503 |
| 08305/029001 | 3/23/1999 | 09/274,739 |
| 08305/031001 | 3/30/1999 | 09/281,358 |
| 08305/032001 | 3/30/1999 | 09/281,361 |
| 08305/030001 | 3/30/1999 | 09/281,765 |
| 08305/035001 | 4/23/1999 | 09/298,306 |
| 08305/034001 | 4/23/1999 | 09/299,066 |
| 08305/060001 | 7/15/1999 | 09/354,930 |
| 08305/038001 | 7/21/1999 | 09/359,056 |
| 08305/042001 | 7/21/1999 | 09/359,065 |
| 08305/037001 | 7/21/1999 | 09/359,068 |
| 08305/039001 | 7/22/1999 | 09/360,294 |
| 08305/043001 | 9/16/1999 | 09/397,381 |
| 08305/051001 | 10/14/1999 | 09/418,961 |
| 08305/044001 | 10/29/1999 | 09/429,882 |
| 08305/053001 | 10/29/1999 | 09/430,625 |
| 08305/052001 | 10/29/1999 | 09/430,734 |
| 08305/054001 | 11/18/1999 | 09/442,871 |
| 08305/056001 | 11/24/1999 | 09/449,194 |
| 08305/057001 | 12/13/1999 | 09/459,720 |
| 08305/062001 | 12/22/1999 | 09/470,284 |
| 08305/063001 | 1/14/2000 | 09/483,362 |
| 08305/064001 | 2/16/2000 | 09/505,645 |
| 08305/065001 | 2/18/2000 | 09/507,565 |
| 08305/066001 | 3/1/2000 | 09/516,433 |
| 08305/069001 | 3/7/2000 | 09/519,930 |
| 08305/068001 | 3/9/2000 | 09/522,286 |
| 08305/067001 | 3/9/2000 | 09/522,287 |
| 08305/059001 | 3/10/2000 | 09/523,127 |
| 08305/070001 | 3/17/2000 | 09/527,422 |
| 08305/079001 | 3/29/2000 | 09/538,043 |
| 08305/072001 | 4/18/2000 | 09/550,816 |
| 08305/071001 | 4/20/2000 | 09/553,980 |
| 08305/081001 | 6/8/2000 | 09/590,785 |
| 08305/073001 | 6/15/2000 | 09/595,592 |
| 08305/074001 | 6/15/2000 | 09/596,757 |
| 08305/076001 | 8/24/2000 | 09/648,403 |
| 08305/078001 | 8/31/2000 | 09/653,527 |
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|--------------|---------------------|---------------------|
| 08305/093001 | 5/15/2001 | 09/681,639 |
| 08305/107001 | 11/27/2001 | 09/683,156 |
| 08305/075001 | 10/12/2000 | 09/687,266 |
| 08305/096001 | 10/18/2000 | 09/692,742 |
| 08305/047002 | 11/9/2000 | 09/711,379 |
| 08305/010002 | 12/18/2000 | 09/739,932 |
| 08305/082001 | 12/22/2000 | 09 <i>1</i> 745,854 |
| 08305/080001 | 12/21/2000 | 09/746,565 |
| 08305/099001 | 1/16/2001 | 09 <i>1</i> 761,218 |
| 08305/098001 | 1/16/2001 | 09/761,868 |
| 08305/083001 | 1/31/2001 | 09/773,400 |
| 08305/085001 | 1/31/2001 | 09 <i>1</i> 778,151 |
| 08305/086001 | 2/22/2001 | 09/792,292 |
| 08305/087001 | 2/23/2001 | 09/792,634 |
| 08305/040002 | 3/23/2001 | 09/816,482 |
| 08305/049002 | 5/2/2001 | 09/847,894 |
| 08305/097001 | 5/16/2001 | 09/858,748 |
| 08305/092001 | 5/15/2001 | 09/859,224 |
| 08305/095001 | 5/16/2001 | 09/860,031 |
| 08305/045002 | 5/29/2001 | 09/867,846 |
| 08305/114001 | 6/5/2001 | 09/876,848 |
| 08305/116001 | 7/9/2001 | 09/901,280 |
| 08305/100001 | 7/26/2001 | 09/917,195 |
| 08305/101001 | 8/3/2001 | 09/922,507 |
| 08305/115001 | 10/10/2001 | 09/975,324 |
| 08305/120001 | 10/12/2001 | 09/976,843 |
| 08305/084001 | 11/21 <i>/</i> 2001 | 09/990,884 |
| 08305/111001 | 10/30/2001 | 10/000,660 |
| 08305/127001 | 10/18/2001 | 10/003,662 |
| 08305/110001 | 10/31/2001 | 10/003,821 |
| 08305/108001 | 11/8/2001 | 10/010,685 |
| 08305/079002 | 12/27/2001 | 10/034,091 |
| 08305/118001 | 10/24/2001 | 10/038,546 |
| 08305/087002 | 10/26/2001 | 10/040,058 |
| 08305/102001 | 10/18/2001 | 10/041,781 |
| 08305/109001 | 10/26/2001 | 10/053,110 |
| 08305/106001 | 10/25/2001 | 10/061,938 |
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SCHEDULE B

| D cket No. | Filing Date | Serial No. | Issue Date | Patent No. |
|--------------|-------------|---------------------|----------------------------|------------|
| 08305/003001 | 9/30/1996 | 08/723,897 | 11/30/1999 | 5,995,163 |
| 08305/014001 | 10/6/1997 | 08/944,794 | 12/21/1999 | 6,005,619 |
| 08305/021001 | 3/10/1998 | 09/038,635 | 3/28/2000 | 6,043,690 |
| 08305/008001 | 3/11/1998 | 09/038,887 | 7/11/2000 | 6,087,970 |
| 08305/016001 | 6/8/1998 | 09/093,968 | 10/24/2000 | 6,137,100 |
| 08305/047001 | 9/25/1998 | 09/161,355 | 9/25/2001 | 6,295,013 |
| 08305/011001 | 10/8/1998 | 09/169,020 | 7/3/2001 | 6,255,970 |
| 08305/010001 | 10/13/1998 | 09/170,944 | 4/10/2001 | 6,215,428 |
| 08305/012001 | 10/16/1998 | 09/173,982 | 11/14/2000 | 6,147,519 |
| 08305/009001 | 11/12/1998 | 09/191,201 | 2/20/2001 | 6,191,714 |
| 08305/013001 | 12/16/1998 | 09/215,571 | 4/11/2000 | 6,049,247 |
| 08305/018001 | 2/4/1999 | 09/246,013 | <i>4/</i> 2 <i>4/</i> 2001 | 6,222,172 |
| 08305/024001 | 3/10/1998 | 09/265,133 | 4/24/2001 | 6,222,175 |
| 08305/025001 | 3/10/1999 | 09/265,936 | <i>2/27/</i> 2001 | 6,194,696 |
| 08305/061001 | 3/15/1999 | 09/270,298 | 3/20/2001 | 6,204,792 |
| 08305/028001 | 3/26/1999 | 09 <i>1</i> 277,617 | 12/26/2000 | 6,166,367 |
| 08305/033001 | 4/1/1999 | 09/283,659 | 2/6/2001 | 6,184,721 |
| 08305/040001 | 5/4/1999 | 09/304,526 | 4/3/2001 | 6,211,804 |
| 08305/041001 | 5/21/1999 | 09/316,701 | 8/1/2000 | 6,097,545 |
| 08305/049001 | 7/20/1999 | 09/357,605 | 5/8/2001 | 6,229,134 |
| 08305/045001 | 8/19/1999 | 09/378,565 | 5/29/2001 | 6,239,456 |

ASSIGNMENT OF PATENTS

This ASSIGNMENT OF PATENTS (this "Assignment of Patents"), dated as of November 21, 2001, is entered into by and among Micron Technology, Inc., a Delaware corporation ("Buyer"), Photobit Corporation, a Delaware corporation ("Parent"; Parent is sometimes referred to herein as a "Seller") and Photobit Technology Corporation, a Delaware corporation and a wholly owned subsidiary of Seller ("Subsidiary"; Parent and Subsidiary are sometimes referred to herein as a "Seller" and sometimes collectively as the "Sellers").

This Assignment of Patents is entered into pursuant to Section 6.23 of the Asset Purchase Agreement dated as of November 21, 2001, (the "Asset Purchase Agreement;" capitalized terms used herein but not otherwise defined herein shall have the same meanings assigned to them in the Asset Purchase Agreement), by and among Parent, Subsidiary, Buyer, Dr. Sabrina Kemeny, Dr. Eric Fossum, Robert Panicacci and the Seller Representative.

Pursuant to the Asset Purchase Agreement, Sellers agreed, among other things, to transfer to Buyer all of Sellers' right, title and interest in and to the Acquired Assets, in exchange for the payment by Buyer of the Purchase Price and the assumption by Buyer of the Assumed Liabilities, in each case on the terms and subject to the conditions provided in the Asset Purchase Agreement.

- 1. Assignment of Patents by Sellers. Sellers hereby irrevocably and formally grant, bargain, sell, transfer, convey, assign and deliver to Buyer all right, title and interest in and to the patents, patent applications and provisional applications owned by each Seller throughout the world, together with any and all rights of such Seller associated with inventions claimed therein and/or with the applications and patents, whether or not such patents are registered with the United States Patent and Trademark Office or other comparable governmental authority of any foreign jurisdiction (including, without limitation, those patents and applications set forth on Exhibit A hereto) (the "Assigned Patents"), free and clear of all encumbrances, together with all causes of action and other rights to sue for and remedies against past, present and future infringements of any of the foregoing, together with the right to collect damages therefore, and rights of priority and protection of interests therein under the laws of any jurisdiction worldwide and all tangible embodiments thereof, to have and to hold the same unto Buyer, its successors and assigns, for and during the existence of such rights and all renewals thereof.
- 2. <u>Further Assurances</u>. Each Seller hereby covenants and agrees that from time to time and at the expense of such Seller and without further consideration, upon request of Buyer, each Seller shall and shall cause each of its affiliates to execute and deliver such instruments and documents, and take such further actions, as Buyer reasonably may request in order to sell, convey, transfer and assign to Buyer, or to record Buyer's interest in or title to, any of the Assigned Patents.
- 3. <u>Power of Attorney</u>. Each Seller hereby constitutes and appoints Buyer as such Seller's true and lawful attorney in fact, with full power of substitution in such Seller's name and

stead, to take any and all steps, including proceedings at law, in equity or otherwise, to execute, acknowledge and deliver any and all instruments and assurances necessary or expedient in order to vest or perfect the aforesaid rights and causes of action more effectively in Buyer or to protect the same or to enforce any claim or right of any kind with respect thereto. Each Seller hereby declares that the foregoing power is coupled with an interest and as such is irrevocable.

- 4. <u>Successors and Assigns</u>. This Assignment of Patents shall be enforceable against the successors and assigns of Sellers and shall inure to the benefit of the successors and assigns of Buyer.
- 5. Governing Law. This Assignment of Patents shall be governed by and construed in accordance with the laws of the United States, in respect to patent issues and in all other respects, including as to validity, interpretation and effect, by the internal laws of the State of California, without giving effect to the conflict of laws rules thereof.

IN WITNESS WHEREOF, this Assignment of Patents has been duly executed and delivered as of the date first written above.

| MICRON TECHNOLOGY, INC. |
|---|
| By: 2 S. Sores |
| Printed Name: W.G. Stover, JR. |
| Title: Vice PRESIDENT OF FINEARCE AND C.F.C |
| |
| PHOTOBIT CORPORATION |
| Ву: |
| Printed Name: |
| Title: |
| PHOTOBIT TECHNOLOGY CORPORATION |
| Ву: |
| Printed Name: |
| Title: |

IN WITNESS WHEREOF, this Assignment of Patents has been duly executed and delivered as of the date first written above.

| MICRON TECHNOLOGY, INC. |
|---------------------------------|
| By: |
| Printed Name: |
| Title: |
| |
| PHOTOBIT CORPORATION |
| By: See 9Cy |
| Printed Name: SABRINA KEMENY |
| Title: |
| |
| PHOTOBIT TECHNOLOGY CORPORATION |
| By: Seling |
| Printed Name: SABRINA KEMEANY |
| Title: EXECUTIVE V. P. |

ACKNOWLEDGMENT - PHOTOBIT CORPORATION

| STATE OF CALIFORNIA |) |
|-------------------------|------------|
| COUNTY OF SAN FRANCISCO |) SS:) |

I, <u>Teresa Solis</u>, a Notary Public in and for said County, in the State aforesaid, DO HEREBY CERTIFY that <u>Sabrina Kemeny</u>, appeared before me this day in person, and acknowledged that she executed and delivered the Instrument of Assignment of Patents above as her free and voluntary act and in her representative capacity for Photobit Corporation, a Delaware corporation, acting in its representative capacity as the Chairman and CEO of Photobit Corporation, a Delaware corporation, for the uses and purposes herein set forth.

IN WITNESS WHEREOF, I have hereunto my hand and notarial seal this 21st day of November 2001.

TERESA SOLIS
COMM. 8 1237290
COMM. 8 1237290
City & County of Sen Francisco O
COMM. EXP. OCT. 22, 2003

Notary Public

My Commission Expires: October 22, 2003

ACKNOWLEDGMENT-PHOTOBIT TECHNOLOGY CORPORATION

| STATE OF CALIFORNIA |) |
|-------------------------|-------|
| |) SS: |
| COUNTY OF SAN FRANCISCO |) |

I, <u>Teresa Solis</u>, a Notary Public in and for said County, in the State aforesaid, DO HEREBY CERTIFY that <u>Sabrina Kemeny</u>, appeared before me this day in person, and acknowledged that she executed and delivered the Instrument of Assignment of Patents above as her free and voluntary act and in her representative capacity for Photobit Technology Corporation, a Delaware corporation, acting in their representative capacity as the Chairman and CEO of Photobit Technology Corporation, a Delaware corporation, for the uses and purposes herein set forth.

IN WITNESS WHEREOF, I have hereunto my hand and notarial seal this 21st day of November 2001.

Notary Pub

My Commission Expires: October 22, 2003

TERESA SOLIS
COMM: 8 1237280

EXHIBIT A

Photobit Patents Issued and Pending Applications.

| P | hotobit Patent or Provisional Application Title | Doscription/Comments | PB NTR # |
|--------|---|---|--------------|
| P | ATENTS ISSUED | | |
| 1 Me | edian Filter With Embedded Analog to Digital Converter | Patent @5,995,163 | 9601 |
| 2 Lo | w-Voltage Common Source Switched-Capacitor Amplifier | Patent #6,049,247 | 9702 |
| 3 Qu | uantum Efficiency Improvements in Active Pixel Sensors | Patent #6,005,619 | 9704 |
| 4 Bio | directional Follower for Driving a Capacitive Load | Patent #6,043,690 | 9719 |
| 5 An | alog-to-Digital Conversion | Patent #6,087,970 | 9603 |
| 6 Lo | w-Voltaga Comparator with Wide Input Voltage Swing | Patent #6,147,519 | 9703 |
| 7 Pro | ogrammable Analog Arithmetic Circuit for Imaging Sensor | Patent #6,166,367 | 9706 |
| 6 0 | errection of Missing Codes Nonlinearity in A to D Converters | Patent #6,255,970 | 9708 |
| 9 Ch | narge-Domain Analog Readout for an Image Sensor | Patent #6,222,175 | 9712 |
| 10 A/C | D Converter Correction Schama | Patent #6,191,714 | 9713 |
| 11 Ac | tive Pixel Sensor With Current Mode Readout | Patent #6,194,696 | 9714 |
| 12 Dif | fferential Non-Linearity Correction Scheme | Patent #6,215,428 | 9716 |
| 13 CA | MOS Image Sensor with Different Pixel Sizes for Different Colors | Patent #6,137,100 | 9718 |
| 14 Pu | ilsa-Controlled Light Emitting Diode Source | Patent #6,222,172 | 9801 |
| 15 CA | MOS Voltage Comparator Capable of Operating With Small Input Voltage Difference | Patent #6,184,721 | 9809 |
| 16 Us | sing Single Lookup Table To Correct Differential Non-Linearity Errors In An Array Of A/D | Patent #6,211,804 | 9813 |
| | proentric Lens with Asphanic Correction | Patent #6,097,545 | 9816 |
| 18 Uş | ing Cascaded Gain Stages for High-Gain and High-Speed Readout of Pixel Sensor Data | Patent #6,229,134 | 9817 |
| 19 Lo | ck-In Pinned Photodiode Photo-detector | Patent #6,239,456 | 9822 |
| 20 Pir | ng-Pong Readout | Patent (78,204,792 | 9828 |
| 21 No | onlinear Flash Analog To Digital Converter Used In Active Pixel System | Patent #6,295,013 | 9819 9819 |
| Pl | HOTOBIT/GENTEX JOINTLY OWNED IP | · | |
| 1 W | Vide Dynamic Range Optical Sensor | Patent #6,008,486 | |
| | chicle Vision System | Patent Application Serial No. 09/001,855 | |
| | ATENT APPLICATIONS | | |
| 1 De | and Pixel Correction by Row/Column Substitution | Patent Application Senal No. 09/031,145 | 9602 |
| 2 Cc | oter Interpolation | Potent Application Serial No. 09/028,961 | 9604 |
| 3 Do | ouble Comparison Successive Approximation Method and Apparatus | Patent Application Serial No. 09/360,294 | 9701 |
| | igital Exposure Circuit For An Image Sensor | Patent Application Serial No. 09/298,308 | 9705 |
| | ethod and Circuit for Fast and Accurate Adjustment of Integration Time for CMOS APS emeras | Patent Application Serial No. 09/281,765 | 9707 |
| | mart Column Controts for High Speed Multi-Resolution Sensors | Patent Application Serial No. 09/251,758 | 9709 |
| 7 In | creasing Readout Speed in CMOS APS Sensors through Block Readout | Patent Application Serial No. 09/274,739 | 9710 |
| 8 A | ctive Pixel Color Linear Sensor With Line-Packed Pixel Readout | Patent Application Serial No. 09/252,428 | 9711 |
| 9 T | hree Sided Buttable CMOS Image Chip | Patent Application Serial No. 09/211,718 | 9715 |

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| | Internal to December 2011 at a 12 of min | Description/Commonts | I DD AMED 4 |
| | Photobit Patent or Provisional Application Title | | PB NTR # |
| 10 | Photodiode-Type Pixel For Global Electronic Shutter And Reduced Lag | Patent Application Serial No. 09/025,079 | 9717 |
| 11 | Wide Dynamic Range Fusion Using Externel Memory Look-Up | Petent Application Serial No. 09/299,036 | 9720 |
| 12 | Active Pixel Sensor With Mixed Analog and Digital Signsi Integration | Patent Application Serial No. 09/183,389 | 9721 |
| 13 | Look Ahead Shutter Pointer Allowing Real Time Exposure Control | Patent Application Serial No. 09/038,888 | 9802 |
| 14 | Readout Circuit With Gain and Analog-to-Digital Conversion For Image Sensor | Patent Application Serial No. 09/264,501 | 9803 |
| 15 | Using A Single Control Line To Provide Select And Reset Signals In Two Rows Of A Digital Imaging Device | Patent Application Serial No. 09/250,623 | 9804 |
| 16 | High Resolution CMOS Circuit Using a Matched Impedance Output Transmission Line | Patent Application Serial No. 09/359,056 | 9806 |
| 17 | Reducing Internal Bus Speed in a Bus System Without Reducing Readout Rate | Patent Application Serial No. 09/359,068 | 9807 |
| 18 | RAM Line Storage for Fixed Pattern Noise Correction | Patent Application Serial No. 09/056,508 | 9808 |
| 19 | Latched Row Logic for a Rolling Exposure Snap | Patent Application Serial No. 09/261,361 | 9810 9812 |
| 20 | Analog To Digital Converter with Internal Data Storage | Patent Application Serial No. 09/281,358 | 9811 |
| 21 | Low Light Sensor Signal to Noise Improvement | Patent Application Serial No. 09/359,085 | 9814 |
| 22 | Nonlinear Flash Analog to Digital Converter Used in Active Pixel System | Patent Application Serial No. 09/161,355 | 9818 9819 |
| 23 | Oversampled Centroid A to D Converter | Patent Application Serial No. 09/430,625 | 9820 |
| 24 | Over Sampled CMOS Image Sensor | Patent Application Serial No. 09/429,776 | 9821 |
| 25 | Pinned Floating Photoreceptor With Active Pixel Sensor | Patent Application Serial No. 09/397,381 | 9823 |
| 26 | Oversampled CMOS Image Sensor | Patent Application Serial No. 09/430,734 | 9824 |
| 27 | Optical Range Finder | Patent Application Serial No. 09/429,882 | 9825 |
| 28 | Color Correction of Multiple Colors Using A Calibrated Technique Micro Power Micro-Sized CMOS Active Pixel | Patent Application Serial No. 09/209,982 | 9826 |
| 29 | | Patent Application Serial No. 09/418,961 | 9827 |
| 30 | ALow Power Signal Chain for Image Sensors CMOS APS | Patent Application Serial No. 09/590,785 | 9829 |
| 31 | Matchad Color CMOS Sensor | Patent Application | 9831 |
| 32 | Clear Plastic Packaging in a CMOS Active Pixel Image | Serial No. 09/287,503 Patent Application | 9832. |
| | | Serial No. 09/442,871 | |
| 33 | Semiconductor Imaging Sensor Array Devices With Dual-Port Digital Readout for CMOS Image Sensor | Patent Application Serial No. | 9833 |
| | With Coard Coarding Of Classic In Active Prival Coards | 09/449,194 | 0004 |
| 34 | High-Speed Sampling Of Signals In Active Pixel Sensors | Patent Application Serial No. | 9834 |
| 25 | M. M. Chie Addressing For The IAC Dur | 09/527,422 | 9835 |
| 35 | Multi-Chip Addressing For The I ² C Bus | Potent Application Serial No. | 0035 |
| 36 | Circuits larger than the max. Reticle size in deep sub micron process | 09/459,720 Patent | 9836 |
| - | | Application Serial No. 09/523,127 | |
| 37 | Compensation for Optical Distortion at Imaging Plane | Patent Application | 9837 |

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| | Photobit Patent or Provisional Application Title | Description/Comments | PB NTR # |
|------|--|---|----------------------|
| 38 | Contoured Surface of Image Plane Array Cover Plate | Patent Application Serial No. 09/470,284 | 9839 |
| 39 | Backside Illumination of CMOS trage Sensor | Patent Application Serial No. 09/483,362 | 9801 |
| 40 | A Technique For Flagging Oversaturated Pixels | Patent Application Serial No. 09/505,645 | 9802 |
| 41 | Diagonalized Image Sensor Pixels For Improved Effective Performance | Patent Application Serial No. 09/507,565 | 9903 |
| 42 | Active Pixel Sensor With Fully-Depleted Buried Photoreceptor | Patent Application Serial No. 09/516,433 | 9904 |
| 43 | An Analog Solution for Oversaturated Pixel Problem | Patent Application Serial No. 09/522,287 | 9905 |
| 44 | Superposed Multi-Junction Color APS | Patent Application Serial No. 09/522,286 | 9906 |
| 45 | Multi Junction APS with Dual Simultaneous Integration | Patent Application Serial No. 09/519,930 | 9907 |
| 46 | A Novel Idea for a New Readout Structure of APS | Patent Application Serial No. 09/595,592 | 9908 9809 9910 |
| 47 | Increasing Pixel Conversion Gain In CMOS Image Sensors | Patent Application Serial No. 09/553,980 | 9912 |
| 48 | Dual Sensitivity Image Sensor | Patent Application Serial No. 09/596,757 | 9915 |
| 49 | Layout Technique For Semiconductor Processing Using Stitching | Patent Application Serial No. 09/687,266 | 9916 9917 |
| 50 | Active Pixel Sensor with Reduced Fixed Pattern Noise | Patent Application Serial No. 09/550,816 | 9918 |
| 51 | Low Voltage Analog-To-Digital Converters With Internal Reference Voltage and Offset | Patent Application Serial No. 09/538,043 | 9922 |
| 52 | Techniques to Increase Signal Dynamic Range in CMOS APS | Patent Application Serial No. 09/653,527 | 9923 |
| 53 | Low Power Analog-To-Digital Conversion | Patent Application Serial No. 09/528,310 | 9926 |
| 54 | Celibration Circuit for Successive Approximation ADC. | Patent Application Serial No. 09/746,565 | 9927 |
| 55 | P-Type Reset/Readout Circuitry for Radiation Hard APS | Patent Application Serial No. 09/648,403 | 9929 |
| 56 | Novel Lenses Using Coherent Optical Fiber Bundles | Patent Application Serial No. 09/745,854 | 9931 |
| 57 | Dynamic Histogram Equalifization for High Dynamic Range Images | Patent Application Serial No. 09/778,151 | 9933 |
| 58 | Compact Realization of 2-Reset Pointer Rolling Shutter in CMOS Sensor | Patent Application Serial No. 09/776,400 | 9935 |
| 59 | Testing Of Solid-State Image Sensors | Patent Application Serial No. 09/692,742 | 9941 |
| 60 | Adjustable Color-Plane-Pixel Integration Times for Asynchronous Pixel Saturation Avoidance | Patent Application Serial No. 09/761,868 | 9943 |
| 61 | Improved Method for Flushed Reset | Patent Application Serial No. 09/858,748 | 9944 |
| 62 . | A New Frame-Shutter Pixel Structure with an Isolated Storage Node | Patent Application Serial No. 09/792,634 | 9945 |
| 63 | Frame-Shuttering Scheme For Increased Frame Rate | Patent Application Serial No. 09/792,292 | 9946 |
| 64 | Shared Photodetector Active Pixel | Patent Application Serial No. 09/881,839 | 9948 |
| 65 | An Optimal Layout Technique for Row/Column Decoders to Reduce Number of Blocks | Patent Application Serial No. 09/860,031 | 9950 |
| 86 | Microlenses With Spacking Elements To Increase An Effective Use of Substrate | Patent Application Serial No. 09/859,224 | 2004 2006 |
| 67 | Pixel Optimization for Color | Patent Application Senal No. 09/922,507 | 2009 |

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| | Photobit Patent or Provisional Application Title | Description/Comments | PB NTR# |
|----|--|--|--------------|
| 68 | Image Sensing System With Histogram Modification | Patent Application Serial No. 09/761,218 | 2012 |
| 69 | Imoga Sensor Having Boostted Reset | Patent Application Serial No. 09/917,195 | 2014 2015 |
| 70 | A High-Speed Analog-To-Digital Converter Using Multiple Staggered Successive Approximation Cells | Provisional Patent Application | 2016 |
| 71 | White Spot Reduction For CMOS Imaging | Serial No. 60/≈>3,324 Provisional Patent Application | 2017 |
| 72 | New Architecture For High-Speed ADC Using Multiple Successive Approximation Cells | Serial No. 60/243,328 Provisional Patent Application | 2019 |
| 73 | CMOS Sensor With Dual Column Parallel Analog-To-Digital Converters | Serial No. 60/253,430 Provisional Patent Application | 2020 |
| 74 | Reference Voltage Circuit For Differential Analog-To-digital Converter (ADC) | Serial No. 60/313,117 Provisional Patent Application | 2021 |
| 75 | Pseudo Random Assignment To Remove FPN Of High-Speed ADC Using Multiple Successive Approximation Cells | Serial No. 60/247,401 Provisional Patent Application Serial No. 60/306,753 | 2022 |
| 76 | Frame-Scale Package | Provisional Patent Application Serial No. 60/245,085 | 2024 |
| 77 | Black-Level Compensation With On-Chip successive Approximation ADC | Provisional Patent Application Serial No. 60/244,412 | 2025 |
| 78 | An Improved Frame Shutter For CMOS APS | Provisional Patent Application Serial No. 60/243,899 | 2028 |
| 79 | Wide Dynamic Range Operation For CMOS Sensor With Freeze-Frame Shutter | Provisional Patent Application Serial No. 60/243,898 | 2027 |
| 30 | Freeze-Frame Shutter Imager With Increased Dynamic Range | Provisional Patent Application Serial No. 60/242,215 | 2028 |
| 31 | Power Optimization For Class A Amplifier With Variable Signal Gain By matching Of Unity Gain Bandwidth To the Demanded Gain | Provisional Patent Application Serial No. 60/285,431 | 2029 |
| 32 | Dynamic Range Extension In Color CMOS Active Pixel Sensors | Provisional Patent Application Serial No. 60/259,352 | 2030 |
| 33 | Reducing Power Consumption And Noise In CMOS APS Sensor Through Block Read-Out | Patent Application Serial No. 09/901,280 | 2031 |
| 34 | Reducing KTC Noise In 3T and 5T CMOS APS | Provisional Patent Application Serial No. 60/281,603 | 2102 |
| 85 | Reference Voltage Stabilization In CMOS Sensors | Patent Application Filed 10/12/01 Serial No. pending | 2109 |
| 86 | Low Power Differential Charge Mode Readout Circuit, Pipelined Gain Stage, And Pipelined ADC For CMOS Active Pixel Sensors | Provisional Patent Application Serial No. 60/280,589 | 2110 |
| 87 | A New Row Driver Circuit For CMOS APS Using Shared Row-Reset Pixels And Charge Pump Boosting Circuit | Patent Application Serial No. 09/876,848 | 2111 |
| 88 | Temperature Sensor Using The Image Read-Out Signal Chain Of An Active Pixel Image Sensor Having Double Sampling Of A Pixel Reset Voltage And A Pixel Image Voltage Level | Provisional Patent Application Serial No. 60/308,718 | 2112 |
| 89 | Method For Optimizing Microlens/CFA/Pixel Cooperative Performance in Image Sensors | Provisional Patent Application Serial No. 60/266,908 | 2113 |
| 90 | On-Chip ADC Test for Image Sensors | Provisional Patent Application Serial No. 60/313,122 | 2115 |
| | Variable Pixel Clock Electronic Shutter Control Algorithm For Corruption-Free Image | Provisional Patent | 2118 |
| 91 | Stream During Pixel Speed Changes | Application Serial No. 60/306,744 | <u> </u> |

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| | Photobit Patent or Provisional Application Title | Description/Comments | PB NTR# |
|----|---|--|---------|
| | | Serial No. 60/607,514 | |
| 93 | Flexy-Power Amplifier. A New Amplifier With Built-In Power Management | Provisional Patent Application Serial No. 60/307,513 | 2120 |